



Air Quality Permitting Technical Analysis

September 30, 2002

Tier II Operating Permit No. 027-00010

The Amalgamated Sugar Company LLC, Nampa, Idaho

T2-010928

Prepared by:

Steve Ogle, E.I.T.
Permit Implementation Analyst
Air Quality Program Office

TABLE OF CONTENTS

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....	3
1. PURPOSE.....	4
2. PROJECT DESCRIPTION.....	4
3. SUMMARY OF EVENTS.....	4
4. FACILITY DESCRIPTION.....	5
5. TECHNICAL ANALYSIS.....	8
6. TIER II OPERATING PERMIT FEES.....	30
7. RECOMMENDATIONS	30
8. BIBLIOGRAPHY.....	30
APPENDIX A - POTENTIAL TAP EMISSIONS INVENTORY.	
APPENDIX B - TECHNICAL MEMORANDUM FOR THE MODELING ANALYSIS	
APPENDIX C - TECHNICAL MEMORANDUM FOR THE TAPS ANALYSES	
APPENDIX D - GRAIN LOADING COMPLIANCE DEMONSTRATION FOR NATURAL GAS COMBUSTION IN THE BOILERS	
APPENDIX E - PROCESS WEIGHT RATE COMPLIANCE DEMONSTRATION	
APPENDIX F - AMBIENT IMPACTS FOR SELECTED TAP EMISSIONS	
APPENDIX G - RESPONSES TO PUBLIC COMMENT	

Acronyms, Units, and Chemical Nomenclature

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AP-42	<i>Compilation of Air Pollutant Emission Factors</i> , Fifth edition
CFR	Code of Federal Regulations
CO ₂	carbon dioxide
CO	carbon monoxide
CSB	concentrated separator byproducts
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
EQM	Environmental Quality Management, Incorporated
gr/dscf	grain/dry standard cubic feet
HAP	hazardous air pollutant(s)
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MACT	Maximum Available Control Technology
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH ₃	ammonia
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O ₃	ozone
O&M	operations and maintenance
Pb	lead
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	<i>Rules for the Control of Air Pollution in Idaho</i>
SIP	State Implementation Plan
SO ₂	sulfur dioxide
TAP	toxic air pollutant(s)
TASCO	The Amalgamated Sugar Company LLC
TDS	total dissolved solids
T/d, T/hr, T/yr	tons per day, tons per hour, and tons per year, respectively
µg/m ³	micrograms per cubic meter
VOC	volatile organic compound(s)

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.400 through 406, for Tier II operating permits.

2. PROJECT DESCRIPTION

This project is for a new Tier II operating permit for the TASCO, Nampa facility. In accordance with IDAPA 58.01.01.403.02, this Tier II operating permit establishes facility-wide requirements necessary to ensure that air emissions from the TASCO facility do not cause or significantly contribute to a violation of the NAAQS. The Tier II project was originally initiated to establish enforceable emissions limits in support of the Northern Ada County PM₁₀ SIP control strategy.

3. SUMMARY OF EVENTS

Current Permitting Action

On November 16, 2001, DEQ issued a draft consent order to TASCO. The consent order would have required TASCO to submit a Tier II operating permit application in order to demonstrate compliance with the NAAQS as part of the Northern Ada County PM₁₀ Maintenance Plan. Although this consent order was never signed by DEQ or TASCO, representatives from both parties met to discuss the terms and conditions of the consent order on November 28, 2001. Based on discussions during the meeting, TASCO and DEQ agreed on the need for a Tier II operating permit and both parties agreed to meet the milestones contained within the draft consent order.

Preliminary modeling analyses submitted by TASCO on March 8, 2002, indicate that ambient impacts of PM₁₀, SO₂, and NO_x emissions from the facility may potentially cause or contribute to a NAAQS violation during certain meteorological conditions. As part of the Tier II operating permit application, TASCO submitted a 5-year plan to reduce emissions from specific sources and increase dispersion of emissions from the Riley boiler.

On May 1, 2002, DEQ received an application for a Tier II operating permit from TASCO. DEQ declared the application complete on May 31, 2002. On August 1, 2002, DEQ issued a draft Tier II operating permit and technical memorandum for facility-review. TASCO submitted comments to DEQ in a letter dated August 8, 2002. The revised Tier II operating permit was issued for public comment on August 12, 2002. A public hearing on the permit was held on September 11, 2002, and the public comment period closed on September 12, 2002. The comments were addressed by DEQ in a document entitled "STATE OF IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY RESPONSE TO PUBLIC COMMENTS ON PROPOSED TIER II AND DRAFT AIR QUALITY TIER I OPERATING PERMIT FOR THE AMALGAMATED SUGAR COMPANY, NAMPA, IDAHO". This document is contained in Appendix G of this technical memorandum. The final Tier II operating permit was issued by DEQ on September 30, 2002.

Permitting History

<i>March 19, 1981:</i>	Air Pollution Source Permit No. 13-0400-0010 was issued for operation of the Riley boiler, one B&W boiler, and three pulp dryers.
<i>January 1, 1984:</i>	Air Pollution Source Permit No. 0400-0010 was issued for operation of the pulp dryers.

- August 1, 1991:** A permit non-applicability determination for alterations to the pulp pelletizer ventilation system was issued by DEQ.
- August 2, 1991:** A permit non-applicability determination for installation of a filter house on two lime kilns was issued by DEQ.
- July 7, 1992:** A permit non-applicability determination for installation and operation of a cyclonic scrubber system was issued by DEQ.
- April 29, 1994:** A permit non-applicability determination for installation and operation of a chromatic separation desugarization unit was issued by DEQ.
- April 26, 1995:** A self-exemption letter from TASCO for installation and operation of a vacuum system in the sugar warehouse was acknowledged by DEQ.
- July 11, 2000:** A self-exemption letter from TASCO for process improvements at the facility was acknowledged by DEQ. The response letter states that "...there was insufficient technical information submitted in your letter for DEQ to concur with your self-exemption determination."
- May 30, 2001:** A proposed energy project, initially submitted to DEQ on March 9, 2001 for a non-applicability determination, was determined to be a modification requiring a permit application.
- July 25, 2001:** The proposed energy project application was withdrawn by TASCO.
- September 30, 2002:** Facility-wide Tier II operating permit No. 027-00010 was issued by DEQ.

4. FACILITY DESCRIPTION

General Facility Process Description

Mechanically harvested sugarbeets are shipped to piling grounds at or near the facility. At the piling grounds, the beets are cleaned using beet pilers that remove loose dirt by passing the beets over screens. The pilers then stack the beets into storage piles. Beets are shipped from off-site storage piling grounds to the facility using trucks or rail cars. Beets are dumped by rail cars, trucks, or front-end loaders into wet hoppers that use a flume to both move and clean the beets. The flumes carry the beets to the beet feeder, which regulates the flow of beets through the system and prevents stoppages in the system. From the feeder, the flumes carry the beets through several cleaning devices, which include rock catchers, sand separators, water spray nozzles, and trash catchers. After cleaning, the beets are separated from the water with dewatering rolls and are transported by chain and bucket elevators to the processing operations.

Sugarbeet processing comprise several steps, including diffusion, juice purification, evaporation, crystallization, dried pulp manufacture, and sugar recovery from molasses. Descriptions of these operations are presented in the following paragraphs.

Before removing the sucrose from the beet by diffusion, the cleaned and washed beets are sliced into long, thin strips called cossettes. The cossettes are conveyed to a continuous diffuser in which hot water is used to extract sucrose from the cossettes. The diffuser is vertical and conveys the cossettes up as water is introduced at the top of the diffuser and flows countercurrent to the cossettes. The water temperature in the diffuser is typically maintained between 50° and 80°C. This temperature depends on several factors,

including the denaturation temperature of the cossettes, the thermal behavior of the beet cell wall, potential enzymatic reactions, bacterial activity, and pressability of the beet pulp. Disinfectants, such as ammonium bisulfate, are sometimes added to the diffuser. The sugar-enriched water that flows from the outlet of the diffuser is called raw juice and contains between 13% and 18% sugar. This raw juice proceeds to the juice purification stage. The processed cossettes (now called pulp) leaving the diffuser are conveyed to the dried-pulp manufacture stage.

In the juice purification stage, non-sucrose impurities in the raw juice are removed so that the pure sucrose can be crystallized. First, the juice passes through screens to remove any small cossette particulates. Then the mixture is heated to 80° to 85°C and proceeds to the liming system. In the liming system tanks, milk of lime is added to the mixture to absorb or adhere to the impurities in the mixture. The juice is then sent to the first carbonation tanks where CO₂ gas is bubbled through the mixture to precipitate the lime as insoluble calcium crystals. Lime kilns are used to produce the CO₂ and lime used in carbonation; the lime is converted to milk of lime in lime slakers. The small, insoluble crystals (produced during carbonation) settle out in a clarifier, after which the juice is again treated with CO₂ (in the second set of carbonation tanks) to remove the remaining lime and impurities.

The pH of the juice is lower during the second carbonation, causing large, easily filterable, calcium carbonate crystals to form. After the filtration, the juice is softened. Then a small amount of SO₂ is added to the juice to inhibit reactions that lead to darkening of the juice. The SO₂ is produced by burning elemental sulfur in sulfur stoves. Following the addition of SO₂, the juice (referred to as thin juice) proceeds to the evaporators.

The evaporating process, which increases the sucrose concentration in the juice by removing water, is performed in a series of five evaporators. Steam from large boilers is used to heat the first evaporator, and the steam from the water evaporated in the first evaporator is used to heat the second evaporator. This heat transfer continues through the five evaporators, and as the temperature decreases, the pressure inside each evaporator is also decreased, allowing the juice to boil at the lower temperatures provided in each subsequent evaporator. Some steam is released from the first three evaporators, and this steam is used as a heat source for various process heaters throughout the plant. After evaporation, the percentage of sucrose in the juice (now referred to as thick juice) is 65% to 75%. Half of the thick juice is sent to storage tanks. The other half is combined with crystalline sugars, produced later in the process, and dissolved in the high melter. This mixture is then filtered to yield a clear liquid referred to as standard liquor, which proceeds to the crystallization operation.

Sugar is crystallized by low-temperature pan boiling. The standard liquor is boiled in vacuum pans until it becomes supersaturated. To begin crystal formation, the liquor is seeded with finely milled sugar. The seed crystals are carefully grown through control of the vacuum, temperature, feed liquor additions, and steam. When the crystals reach the desired size, the mixture of liquor and crystals, known as massecuite or fillmass, is discharged to the mixer. From the mixer, the massecuite is poured into high-speed centrifugals, in which the liquid is centrifuged into the outer shell, and the crystals are left in the inner centrifugal basket. The sugar crystals are then washed with pure hot water and are sent to the granulator, which is a rotary drum dryer, and then to the cooler. The wash water, which contains a small quantity of sucrose, is pumped to the vacuum pans for processing. After cooling, the sugar is screened and then either packaged or stored in large silos for future packaging.

The liquid that was separated from the sugar crystals in the centrifugals is called syrup. This syrup serves as feed liquor for the "second boiling" and is introduced back into a second set of vacuum pans. The crystallization/centrifugation process is repeated once again, resulting in the production of molasses.

The molasses produced in the third boiling step can be used in the production of livestock feed. This molasses can also be further desugared using the separator process. The products of the separator process are extract (the high sugar fraction) and CSB (the low sugar fraction). The extract can be stored in

tanks or immediately processed in the sugar end, like thick juice. The CSB is used as livestock feed as a liquid or as an addition to the pulp.

Wet pulp from the diffusion process is another product of sugarbeet processing. Some of the wet pulp is sold as cattle feed. However, most of the wet pulp is pressed to reduce the moisture content from about 95% to about 75%. The water removed by the presses is collected and used as diffusion water. After pressing, the pulp may be sold as cattle feed or sent to the dryer. The pulp dryer can be fired by natural gas or coal. As the pulp is dried, the gas temperature decreases and the pulp temperature increases. The resulting product is typically pelletized and is sold as livestock feed, but may also remain un-pelletized and sold in this form.

Emissions sources at the facility that are specifically addressed in the Tier II operating permit are listed in Table 4.1.

Table 4.1: SOURCES WITH SPECIFIC PERMIT CONDITIONS

Permit Sections	Emissions Source and Unit Number(s)
3	Three coal/natural gas-fired boilers (S-B1, S-B2, S-B3)
4	One natural gas-fired boiler (S-B4)
5	Three pulp dryers (S-D1, S-D2, S-D3)
6	Five pellet mills (S-D4, S-D5, S-D6, S-D7, S-D8)
7	Two lime kilns (S-K1, S-K2)
8	Two process slakers (S-K4)
9	One drying granulator (S-W1)
10	Two cooling granulators (S-W2, S-W3)
11	Three sugar handling systems (S-W4, S-W6, S-W7)
12	Lime kiln building (S-K3)

Facility Classification

In accordance with IDAPA 58.01.01.006.55, the facility is classified as major for a PTE PM, PM₁₀, CO, NO_x, VOC, SO₂, and NH₃ at rates greater than 100 T/yr. The facility is subject to PSD permitting requirements for a PTE PM, PM₁₀, CO, NO_x, and SO₂ at rates greater than 250 T/yr. The facility is also classified as major in accordance with IDAPA 58.01.01.008.10(c) for a PTE PM₁₀, CO, NO_x, VOC, and SO₂ at rates greater than 100 T/yr. The steam plant (B&W Boilers No. 1 and No. 2, Riley Boiler, and Union Boiler) is a designated facility in accordance with IDAPA 58.01.01.006.27(v).

The facility is not currently subject to federal NSPS in accordance with 40 CFR Part 60, NESHAP in accordance with 40 CFR Part 61, or MACT standards in accordance with 40 CFR Part 63. The standard industrial classification is 2063 and the AIRS/AFS classification is A.

Area Classification

The TASCO facility is located in Nampa, Idaho, which is in Canyon County, Air Quality Control Region 64. The area is unclassified for all criteria pollutants, although Canyon County is located in the Treasure Valley Air Shed Management Plan area.

5. TECHNICAL ANALYSIS

Emissions Estimates

1. Criteria Pollutants

Emissions rates of criteria pollutants are taken from estimates submitted by TASCO in the Tier II operating permit application and the Northern Ada County PM₁₀ Maintenance Plan emissions inventory. The emissions rate calculations were reviewed by DEQ and determined to be largely consistent with accepted methodology.

Although engineering estimates and uncertified source tests were used as a basis for several emissions rate calculations, DEQ accepted these emissions rate calculations as a basis for establishing permit limits in lieu of more accurate information. Performance testing requirements in the Tier II permit will be used to verify accuracy of all emissions estimates subject to federally enforceable permit emission limits.

Table 5.1: CONTROLLED POTENTIAL EMISSIONS OF CRITERIA POLLUTANTS

Potential Emissions ^a – Hourly (lb/hr), and Annual ^b (T/yr)										
Source Description	PM ₁₀ ^c		NO _x		CO		VOC		SO ₂	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
B&W Boiler No. 1 (S-B1)	28.4	124.2	104.6	458.1	10.5	46.0	0.4	1.9	220.5	965.8
B&W Boiler No. 2 (S-B2)	28.4	124.2	104.6	458.1	10.5	46.0	0.4	1.9	220.5	965.8
Riley Boiler (S-B3)	81.3	355.9	390.0	1708.2	30.0	131.4	1.3	5.6	632.5	2770.4
Union Boiler (S-B4)	1.6	6.8	7.2	31.5	6.0	26.3	0.4	1.7	0.0	0.2
South Pulp Dryer (S-D1)	18.7	82.0	38.0	166.5	126.8	555.2	4.2	18.5	13.6	59.7
Center Pulp Dryer (S-D2)	0.0	0.0			0.0	0.0	0.0	0.0		
North Pulp Dryer (S-D3)	0.0	0.0			0.0	0.0	0.0	0.0		
Pellet Mill No. 1 (S-D4)	0.1	0.5								
Pellet Mill No. 2 (S-D5)	0.2	0.7								
Pellet Mill No. 3 (S-D6)	0.2	0.7								
Pellet Mill No. 4 (S-D7)	0.2	0.7								
Pellet Mill No. 5 (S-D8)	0.1	0.5								
A Lime Kiln (S-K1)	0.1	0.4	1.4	6.1	685.1	3000.7	0.7	3.0	3.5	15.2
B Lime Kiln (S-K2)	0.1	0.5	1.6	7.1	795.8	3485.6	0.8	3.5	4.0	17.7
A and B Process Slakers (S-K4)	1.4	6.1								
Drying Granulator (S-W1)	1.1	5.0								
No. 1 Cooling Granulator (S-W2)	0.3	1.3								
No. 2 Cooling Granulator (S-W3)	0.3	1.3								
Process No. 2 Handling System (S-W4)	0.3	1.2								
Specialties Handling System (S-W6)	0.1	0.6								
Packaging Line Handling System (S-W7)	0.2	0.9								
Lime Kiln Building (S-K3)	0.8	3.5								
A Side Sulfur Stove (S-O2)									2.1	9.2
B Side Sulfur Stove (S-O3)									2.1	9.2
Main Mill (S-O1)							11.2	48.9		
Fugitives (F-D9, F-D10, F-O4, F-O5O6a, F-O5O6b, F-O5O6c, F-O7, F-O8, F-O9, F-O10)	n/a ^d	35.0								

^a As determined by a pollutant-specific U.S. EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

^b As determined by multiplying the actual or allowable (if actual is not available) pound per hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by the actual annual production rates.

^c Includes condensables.

^d The hourly emissions rates of these sources varies by season; refer to the Tier II application.

2. Toxic Pollutants

Although the primary purpose of the Tier II operating permit was to evaluate NAAQS compliance for criteria pollutant emissions, DEQ performed a limited TAP emissions rate estimate inventory to evaluate and/or identify potential hazards to public health or the environment. The potential TAP inventory is located in Appendix A and is based on TAP emissions sources identified in TASCO's Tier I operating permit application and the Northern Ada County PM₁₀ Maintenance Plan.

Modeling

1. Criteria Pollutants

Appendix B contains a technical memorandum addressing the modeling analysis submitted by TASCO as part of the Tier II operating permit application. DEQ contracted EQM to review TASCO's modeling analysis and to conduct an independent modeling analysis to determine the ambient impacts of criteria pollutants from the facility. Both analyses indicate that the estimated ambient impacts of criteria pollutants will be within the NAAQS after TASCO has fully implemented the provisions of the compliance schedule (refer to Section 13 of the Tier II operating permit).

Table 5.2: FULL IMPACT ANALYSIS FOR CRITERIA POLLUTANTS

Pollutant	Averaging Period	Ambient Concentration (µg/m ³)	Background Concentration (µg/m ³)	Total Ambient Concentration (µg/m ³)	Regulatory Limit ^a (µg/m ³)	Compliant (Y or N)
NO ₂	Annual	26.6 ^c	40.0	66.6	100	Y
SO ₂	3-hour	253 ^c	374	627	1,300	Y
	24-hour	113 ^c	120	233	365	Y
	Annual	15.9 ^c	18.3	34.2	80	Y
CO	1-hour	9,262 ^c	12,700	21,962	40,000	Y
	8-hour	2,816 ^c	7,100	9,916	10,000	Y
Pb	Calendar Quarter	0.59	0.15	0.74	1.5	Y
PM ₁₀	24-hour	59.1 ^d	90	149	150	Y
	Annual	19.8 ^b	28.5	48.3	50	Y

^a IDAPA 58.01.01.577

^b First highest modeled value.

^c Second highest modeled value.

^d Sixth highest modeled value.

The Tier II permit specifically establishes PM₁₀ and CO emissions rate limits because potential, facility-wide emissions rates of these two pollutants, after implementation of the compliance schedule, result in estimated ambient impacts that are very close to the applicable NAAQS limits. As a result, the Department has imposed specific PM₁₀ and CO emissions rate limits in the Tier II operating permit to safe guard the NAAQS. After implementation of the compliance schedule, potential emission rates of other criteria pollutants do not result in estimated ambient impacts that threaten any applicable ambient standard; therefore, specific emissions limits were not required in the permit. In addition, these emissions will be limited by the operational constraints used to control PM₁₀ and CO emissions rates. In this situation, PM₁₀ and CO emissions rates are commonly referred to as "limiting pollutants", in that permit conditions limiting emissions of these pollutants serve to limit other pollutant emissions rates.

The Tier II project was originally initiated to establish enforceable emissions limits as part of the Northern Ada County PM₁₀ SIP control strategy. The modeling analysis conducted as part of the

Northern Ada County PM₁₀ Maintenance Plan evaluated the ambient impacts of emissions of PM₁₀, NO_x, SO₂, VOC, CO, and NH₃. The Tier II operating permit establishes emissions limits for PM₁₀ and CO that are equal to or lower than the emissions rates for PM₁₀ and CO modeled in the maintenance plan; however, the emission rate limits for the pellet mills and dryers will not go into effect until second and fifth year of the permit term, respectively. Therefore, Permit Condition 13.2 establishes interim emissions limits for these two sources. The interim limits are equal to the emissions rates used in the Northern Ada County PM₁₀ Maintenance Plan, and thereby preserve the integrity of the maintenance plan until the compliance schedule can be fully implemented.

Emissions rates of NO_x, SO₂, VOC, and NH₃ used in the maintenance plan modeling demonstration for the TASCO facility are based on maximum operational constraints and require no additional reductions in this permit (i.e., the emissions rates are calculated from emission factors and maximum design capacities which represent worst case).

EQM also conducted a modeling analysis of current, potential emissions rates from the TASCO facility (i.e., before implementation of the compliance schedule). This analysis indicates that current emissions rates of PM₁₀, SO_x, and NO_x may result in estimated ambient impacts that cause or significantly contribute to a violation of the NAAQS. Refer to Appendix A of the memorandum contained in Appendix B of this technical memorandum. As a result, DEQ has required TASCO to conduct ambient monitoring for PM₁₀ and SO_x (refer to Ambient Monitoring Requirements, on page 11 of this technical memorandum).

2. Toxic Pollutants

Based on the potential TAP emissions rates shown in Appendix A of this memorandum, DEQ determined that modeling was required for certain TAP emissions to assure compliance with IDAPA 58.01.01.161. The estimated ambient impacts resulting from emissions of several metals (arsenic, beryllium, cadmium, mercury, nickel, and selenium) and aldehyde compounds (acetaldehyde, crotonaldehyde, formaldehyde, propionaldehyde, and total aldehyde-compounds) were modeled using the modeling files submitted by TASCO. The potential emissions estimates in Appendix A of this memorandum were modeled using seasonal constraints (i.e., maximum hourly emission rates during fall and winter months and no emissions during the spring and summer months) to approximate actual emissions rates. The results of the impact analyses for these TAP emissions are presented in Appendix F of this technical memorandum, and indicate that the impacts of these pollutants do not currently warrant any action under IDAPA 58.01.01.161 (refer to the technical memorandum in Appendix C of this memorandum).

Regulatory Review

1. Scope

In accordance with IDAPA 58.01.01.403.02, this Tier II operating permit establishes facility-wide requirements necessary to ensure that air emissions from the TASCO facility do not cause or significantly contribute to a violation of the NAAQS. The Tier II project was originally initiated to establish enforceable emissions limits in support of the Northern Ada County PM₁₀ SIP control strategy.

This Tier II permit incorporates all applicable permit terms from the following permits:

- Air Pollution Source Permit No. 13-0400-0010, dated March 19, 1981.
- Air Pollution Source Permit No. 0400-0010, dated January 1, 1984.

2. Facility-wide Conditions

Fugitive Emissions Requirements – (Facility-wide Conditions 2.1 and 2.2)

Facility-wide Condition 2.1 requires reasonable control of fugitive emissions from the facility, in accordance with IDAPA 58.01.01.650-651. Facility-wide Condition 2.2 establishes specific criteria for reducing fugitive emissions from specific area sources, and is referred to as the Fugitive Dust Management Plan. The Fugitive Dust Management Plan was submitted by TASCO as part of the Tier II operating permit application (refer to Appendix 4 of the application).

Compliance Demonstration

Facility-wide Condition 2.2 requires TASCO to monitor and record, on a weekly basis, compliance with the provisions of the Fugitive Dust Management Plan. Facility-wide Condition 2.3 requires TASCO to document all fugitive dust complaints, as well as corrective actions taken in response to any valid complaints. Facility-wide Condition 2.4 requires TASCO to conduct monthly facility-wide fugitive emissions inspections. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emissions inspection.

Ambient Monitoring Requirements – (Facility-wide Condition 2.5)

A preliminary modeling analysis of current potential emissions rates, prior to implementation of the compliance schedule (refer to Section 13 of the Tier II permit), submitted to DEQ by TASCO on March 8, 2002, indicates that the estimated ambient impacts of PM₁₀, SO₂, and NO_x may cause or significantly contribute to a violation of the NAAQS during certain meteorological conditions. Modeling analyses conducted by EQM also indicate potential NAAQS exceedences for PM₁₀, SO₂, and NO_x before provisions of the compliance schedule are in place (refer to Appendix B of this memorandum). Once the compliance plan is fully implemented, modeling analyses conducted by both TASCO and EQM demonstrate that potential emissions from the facility will not cause or significantly contribute to a NAAQS violation.

In order to implement the compliance schedule, a five-year plan has been proposed by TASCO. Although TASCO has successfully demonstrated that potential emissions from the facility will not cause or significantly contribute to a violation of applicable standards after implementation of the compliance schedule, the Tier II permit application fails to demonstrate compliance with IDAPA 58.01.01.403.02 prior to compliance schedule implementation. Therefore, an ambient monitoring system for PM₁₀ and SO_x is required to fulfill the requirements of Section 403 of the *Rules* and to safe guard public health and the environment.

Although potential NO_x emissions, prior to compliance schedule implementation, resulted in estimated ambient impacts over the standard, it is unlikely that the actual emissions of NO_x will result in impacts that cause or significantly contribute to a NAAQS violation. Additionally, TASCO's emissions estimates make the conservative assumption that all NO_x emissions are NO₂ (i.e., the estimated impact is overestimated). It should also be noted that the NO₂ NAAQS is an annual standard, and Permit Condition 13.4.2 must be implemented within one year of final Tier II permit issuance. Therefore, a NO_x monitor would not accumulate a year of monitoring data prior to TASCO's implementation of the relevant (i.e., estimated impact-reducing) provision of the compliance schedule.

Therefore, Facility-wide Condition 2.5 requires TASCO to install, operate, and maintain ambient monitors for PM₁₀ and SO₂ until TASCO has fully implemented the provisions of the compliance

plan. These monitors are necessary to safe guard the NAAQS, as required by IDAPA 58.01.01.403.02, and are required in accordance with IDAPA 58.01.01.405.01.

Compliance Demonstration

Facility-wide Condition 2.5.1 requires TASCO to submit an ambient monitoring protocol to DEQ for approval within 120 days of Tier II operating permit issuance. Facility-wide Condition 2.5.2 requires TASCO to conduct and submit a modeling analysis for placing the monitors, with all backup data requested by DEQ, for approval within 60 days after the modeling protocol is approved. Facility-wide Condition 2.5.3 requires that all monitoring data shall be submitted to DEQ, in accordance with the approved ambient monitoring protocol. These conditions assure a means for compliance demonstration with the requirements of Facility-wide Condition 2.5.

Performance Testing Requirements – (Facility-wide Conditions 2.6-2.9)

Facility-wide Condition 2.6-2.9 contains performance testing provisions required within the Tier II operating permit. The performance tests measure actual emissions rates while operating parameters are measured. This allows the permit to establish specific operating parameter ranges that will demonstrate compliance with applicable emissions limits. In this manner, DEQ can utilize operating parameters to determine compliance with emissions limits. All sources with specific emissions limits are required to undergo performance testing.

Compliance Demonstration

Facility-wide Condition 2.6 requires that TASCO submit the results of required performance tests to DEQ within 30 days of the date upon which the compliance test is concluded.

Performance Testing Schedule – (Facility-wide Conditions 2.10-2.14)

Facility-wide Conditions 2.10-2.14 contain source-specific performance testing requirements to be conducted during the life of the Tier II operating permit. The provisions of Facility-wide Conditions 2.10-2.14 contain scheduling requirements, references to applicable emissions rate standards, and required monitoring parameters for each source to be tested.

The required performance testing is scheduled to occur at various intervals over the life of the permit in order to allow implementation of the compliance schedule in Section 13 of the Tier II operating permit.

Facility-wide Condition 2.10 contains performance testing requirements for PM₁₀ emissions from the South, Center, and North dryers. Performance testing for these sources is required within 120 days of issuance of the Tier II operating permit and before the end of the 2002/2003 beet campaign to demonstrate compliance with the emissions limits of Permit Condition 13.2. These emissions limits are taken from emissions rates used to develop the Northern Ada County PM₁₀ Maintenance Plan. Although the compliance schedule (refer to Section 13 of the Tier II operating permit) mandates that emissions from the dryers and pellet mills be reduced to levels that demonstrate no cause or significant contribution to a violation of the NAAQS (i.e., Permit Conditions 5.3 and 6.3), these reductions are scheduled to be implemented over the course of five years. The Northern Ada County PM₁₀ Maintenance Plan is currently scheduled for implementation in 2002. All emission rates used in the Northern Ada County PM₁₀ Maintenance Plan are required to be federally enforceable; therefore, TASCO is required to source test these sources to demonstrate compliance with the limits of Permit Condition 13.2.

Permit Condition 5.5 restricts the throughput of the dryers, based upon the average throughput attained during the most recent DEQ-approved performance test. This ensures that emissions

from the dryers will not exceed the limits used to develop the Northern Ada County PM₁₀ Maintenance Plan.

DEQ reviewed the methodology used to calculate PM₁₀ emissions rate estimates for the pellet mills (presented in Appendix 2 of TASCO's Tier II permit application). It appears that TASCO was conservative in calculating the pellet mill emissions rate estimates (i.e., the estimated emissions rates are probably greater than actual emissions rates). TASCO used AP-42 emission factors, assumed that all particulate matter is PM₁₀, and added a 15% safety factor to the emissions estimates. Due to the temporary status of the current exhaust arrangement of the pellet mills (control equipment is required to be installed on the pellet mills by Permit Condition 6.6) and the conservative nature of the emissions estimates, DEQ has not required source testing for these sources prior to implementation of Permit Condition 6.6. However, the requirement to conduct a source test for PM₁₀ emissions from the pellet mills after installation of the control equipment (Permit Condition 2.11.3 of the proposed Tier II permit) remains in the permit.

Facility-wide Condition 2.11 contains performance testing requirements for the B&W No. 1, B&W No. 2, and Riley boilers; the pellet mills; and the lime kilns. Performance testing for these sources is required during the first beet campaign following fulfillment of the provisions of Permit Condition 13.4, to demonstrate compliance with the emissions limits of Permit Conditions 3.3, 6.3, and 7.3, respectively. Permit Condition 13.4 requires that a baghouse be installed on the pellet mills (by reference to Permit Condition 6.6) and that the flue gases of the three boilers be merged within the first year of the permit term. Therefore, these source tests are required after implementation of these phases of the compliance schedule. Testing is required for these sources because modeling analyses indicate that the ambient impacts of PM₁₀ and CO emissions from the facility are close to the NAAQS for PM₁₀ and CO.

Facility-wide Condition 2.12 contains performance testing requirements for the Union boiler, the process slakers, and the drying granulator. Performance testing for these sources is required during the second beet campaign following fulfillment of the provisions of Permit Condition 13.4, to demonstrate compliance with the emissions limits of Permit Conditions 4.3, 8.3, and 9.3, respectively. Testing is required for these sources because modeling analyses indicate that the ambient impacts of PM₁₀ emissions from the facility are close to the NAAQS for PM₁₀.

Facility-wide Condition 2.13 contains performance testing requirements for the No. 1 cooling granulator, the sugar handling systems, and the lime kiln building. Performance testing for these sources is required during the third beet campaign following fulfillment of the provisions of Permit Condition 13.4, to demonstrate compliance with the emissions limits of Permit Conditions 10.3, 11.3, and 12.3, respectively. Testing is required for these sources because modeling analyses indicate that the ambient impacts of PM₁₀ and CO emissions from the facility are close to the NAAQS for PM₁₀ and CO.

Facility-wide Condition 2.14 contains performance testing requirements for the South dryer. Performance testing for these sources is required during the first beet campaign following fulfillment of the provisions of Permit Condition 13.8, to demonstrate compliance with the emissions limits of Permit Conditions 5.3, and 5.4, respectively. Permit Condition 13.8 requires that a steam system be installed as a replacement for the Center and North dryers within the fifth year of the permit term.

As part of the emissions control plan submitted by TASCO in the Tier II operating permit application, emissions from the South dryer will be reduced by 50%. Therefore, these source tests are required after implementation of these phases of the compliance schedule.

Compliance Demonstration

Facility-wide Condition 2.6 requires that the permittee submit the results of the performance testing with 30 days of completion of the test.

Operations and Maintenance Manual requirements – (Facility-wide Condition 2.15)

Facility-wide Condition 2.15 contains requirements for development of O&M manuals under the Tier II operating permit. The manuals are required to ensure good working order and efficient operation of control devices used to reduce emissions from the facility. The terms and conditions of Facility-wide Condition 2.15 are self-explanatory and do not require additional detail.

Compliance Demonstration

Facility-wide Condition 2.15.4 requires that the O&M manuals shall be maintained onsite and shall be made available to Department representatives upon request.

Monitoring and Recordkeeping Requirements – (Facility-wide Condition 2.16)

Facility-wide Condition 2.16 contains general monitoring and recordkeeping requirements for the Tier II operating permit. This is a self-explanatory provision.

Reporting and Certification Requirements – (Facility-wide Condition 2.17)

Facility-wide Condition 2.17 contains general reporting requirements for the Tier II operating permit. This is a self-explanatory provision.

Obligation to Comply – (Facility-wide Condition 2.18)

Facility-wide Condition 2.18 requires that TASCO comply with all applicable local, state, and federal rules and regulations. Facility-wide Condition 2.18 is a self-regulated provision.

3. Emissions Unit - B&W No. 1, B&W No. 2, and Riley Boilers (S-B1, S-B2, S-B3)

Emissions Limit – (Permit Condition 3.3)

Permit Condition 3.3 establishes hourly and annual PM₁₀ and CO emissions limits for the three boilers. The modeling analysis indicates that potential emissions of these two criteria pollutants from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, these limits are included in the Tier II operating permit to safeguard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.11.1 requires TASCO to conduct a series of performance tests to demonstrate compliance with the emissions limits of Permit Condition 3.3. TASCO is required to conduct tests for PM₁₀ with coal as the exclusive fuel and for CO with natural gas as the exclusive fuel. The fuel-specific performance tests are required because AP-42 emissions factors indicate that PM₁₀ emissions rates may be higher with coal fuels, while the CO emissions rates may be higher with natural gas as a fuel. This permit condition requires that the test be conducted at worst-case conditions, and that the fuel-firing rate, steaming rate, and baghouse pressure drop be recorded during the test.

This permit condition also requires that additional tests be performed if the emissions rate recorded during the test is greater than 75% of the emissions rate limits in Permit Condition 3.3 (refer to Facility-wide Condition 2.11.5). Facility-wide Condition 2.6 requires that TASCO submit the results of the performance test to DEQ for evaluation and approval.

Permit Condition 3.5 limits the fuel-firing rate of each boiler to 120% of the average firing rate achieved during the most recent DEQ-approved performance test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 3.3. Permit Condition 3.8 requires that TASCO monitor and record the type and amount of fuel fired in each boiler. These permit conditions limit the emissions rates of PM₁₀ and CO from the boilers and use the fuel-firing rates as methods for determining continual compliance with the emissions limits of Permit Condition 3.3.

Emissions from the boilers are controlled by baghouses. Permit Condition 3.7 requires that the baghouses be in operation at all times during boiler operation and that the pressure drop across the baghouses be within manufacturer or O&M manual specifications. The performance test requirements of Facility-wide Condition 2.11.1 require TASCO to monitor the pressure drop across the baghouses during the tests. Permit Condition 3.9 requires TASCO to monitor the pressure drop across the baghouses continuously. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the boiler baghouses based, in part, on the monitoring parameters from the performance test. The O&M manuals must be made available to Department representatives upon request. These provisions assure that the control equipment used to reduce emissions from the boilers is operated and maintained in good working condition.

Grain-loading Limit – (Permit Condition 3.4)

Permit Condition 3.4 requires emissions from the boilers to comply with the grain-loading limits established by IDAPA 58.01.01.677-678. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Facility-wide Condition 2.11.2 requires the permittee to conduct performance tests to establish compliance with the grain-loading standard of Permit Condition 3.4 when firing the boilers on coal. The performance test must be conducted at worst-case conditions, and the coal feed rate and baghouse pressure drops must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 3.5 limits the coal feed rate of each boiler to 120% of the average firing rate achieved during the most recent DEQ-approved performance test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 3.4. Permit Condition 3.7 requires that the pressure drop across the baghouse be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the boiler baghouses based, in part, on the monitoring parameters from the performance test. Permit Condition 3.8 requires TASCO to monitor and record the coal feed rate of each boiler, while Permit Condition 3.9 requires monitoring of the baghouse pressure drop.

These permit conditions limit the emissions rate of PM from the boilers and the coal feeding rate of each boiler and use the baghouse pressure drops as methods for determining continual compliance with the emissions limits of Permit Condition 3.4.

Appendix D of this memorandum contains calculations that show compliance with the grain-loading standard, using AP-42 emissions factors for natural gas combustion. Emissions factors given in AP-42 are generally accepted as conservative estimates. Even a conservative estimate of emissions from natural gas combustion results in an approximated grain loading well below the standard of 0.015 gr/dscf. Therefore, when using natural gas in the boilers, the permittee is in compliance with the grain-loading standard.

4. Emissions Unit - Union Boiler (S-B4)

Emissions Limit – (Permit Condition 4.3)

Permit Condition 4.3 establishes hourly and annual PM₁₀ and CO emissions limits for the Union boiler. The modeling analysis indicates that potential emissions of these two criteria pollutants from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, these limits are included in the Tier II operating permit to safeguard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.12.1 requires TASCO to conduct performance test(s) to demonstrate compliance with the emissions limits of Permit Condition 4.3. TASCO is required to conduct tests for PM₁₀ and CO at worst-case conditions, and record the fuel-firing rate and steaming rate during the test. Facility-wide Condition 2.6 requires that TASCO submit the results of the performance test to DEQ for evaluation and approval.

Permit Condition 4.5 limits the fuel-firing rate of the Union boiler to 120% of the average firing rate achieved during the most recent DEQ-approved performance test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 4.3. Permit Condition 4.7 requires that TASCO monitor and record the amount of fuel fired in the boiler. These permit conditions limit the emissions rates of PM₁₀ and CO from the boilers and use the fuel-firing rate as a method for determining continual compliance with the emissions limits of Permit Condition 4.3.

Grain-loading Limit – (Permit Condition 4.4)

Permit Condition 4.4 requires emissions from the Union boiler to comply with the grain-loading limits established by IDAPA 58.01.01.677-678. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Permit Condition 4.6 states that the Union boiler may be fired only with natural gas. Appendix D of this memorandum contains calculations that show compliance with the grain-loading standard, using AP-42 emissions factors for natural gas combustion. Emissions factors given in AP-42 are generally accepted as conservative estimates. Even a conservative estimate of emissions from natural gas combustion results in an approximated grain loading well below the standard of 0.015 gr/dscf. Therefore, as long as the permittee uses only natural gas in the boilers, the permittee is in compliance with the grain-loading standard.

5. Emissions Unit - North, South, and Center Pulp Dryers (S-D1, S-D2, S-D3)

Emissions Limit – (Permit Condition 5.3)

Permit Condition 5.3 establishes hourly and annual PM₁₀ and CO emissions limits for the South pulp dryer after the requirements of Permit Condition 13.8. The modeling analysis indicates that potential emissions of these two criteria pollutants from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, these limits are included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.14.1 requires TASCO to conduct performance tests on the South dryer to demonstrate compliance with the emissions limits of Permit Condition 5.3. TASCO is required to conduct tests for PM₁₀ with coal as the exclusive fuel and for CO with natural gas as the exclusive fuel. The fuel-specific performance tests are required because AP-42 emissions factors indicate that PM₁₀ emissions rates may be higher with coal fuels, while the CO emissions rates may be higher with natural gas as a fuel. This permit condition requires that the test be conducted at worst-case conditions, and that the fuel firing rate, pulp throughput rate, and control equipment pressure drop be recorded during the test. Facility-wide Condition 2.6 requires that TASCO submit the results of the performance test to DEQ for evaluation and approval.

Permit Condition 5.5 limits the pulp throughput, coal feed rate, and natural gas firing rate of the dryers to 120% of the average firing rate achieved during the most recent DEQ-approved performance test. This permit condition also specifies that the maximum design capacities of the dryers cannot be exceeded regardless of source test results. Permit Condition 5.9 requires that TASCO monitor and record the type and amount of fuel and the pulp throughput of the dryer. These permit conditions limit the emissions rates of PM₁₀ and CO from the dryers and use the throughput and fuel-firing rate as methods for determining continual compliance with the emissions limits of Permit Condition 5.3.

Emissions from the boilers are controlled by a series of cyclones and scrubbers. Permit Condition 5.7 requires that the cyclones and scrubbers be in operation at all times during dryer operation, and that the scrubber differential pressure through the scrubbers be within manufacturer or O&M manual specifications. The performance test requirements of Facility-wide Condition 2.10 require TASCO to monitor scrubber differential pressure during the tests. Permit Condition 5.11 requires TASCO to continually monitor the scrubber differential pressure through the scrubbers. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the dryers' control equipment based, in part, on the monitoring parameters from the performance test. The O&M manuals must be made available to Department representatives upon request. These provisions assure that the control equipment used to reduce emissions from the South dryer is operated and maintained in good working condition.

The dryer scrubbers use water from the beet flume. This water can become saturated with TDS over time, possibly reducing the removal efficiency of the scrubber; however, TASCO has asserted that the concentration of TDS in the scrubber water does not affect the emissions rate of PM from the dryers. There is currently no evidence that PM removal efficiency is affected by TDS content of the scrubber water, although DEQ has determined that more conclusive data must be gathered to confirm this assertion. Therefore, Permit Condition 5.8 requires that the concentration of TDS in the scrubber water be maintained within manufacturer or O&M manual specifications. The performance test requirements of Facility-wide Condition 2.10 require TASCO to monitor TDS concentrations in the scrubber water during the tests. Permit Condition 5.11 requires TASCO to monitor the concentration of TDS in the scrubber water during the beet campaign. Facility-wide

Condition 2.15 requires TASCO to develop O&M manuals for the dryers' control equipment based, in part, on the monitoring parameters from the performance test. The O&M manuals must be made available to Department representatives upon request. These provisions assure that the control equipment used to reduce emissions from the South dryer is operated and maintained in good working condition, but also allows compilation of data showing TDS concentration over time to be accumulated. A new Tier II permit application must be submitted by TASCO after implementation of the compliance plan (refer to Permit Condition 13.9); during the development of this Tier II permit, DEQ will evaluate the TSD concentration data to determine if specific TSD concentration limits are required to limit PM emissions.

Section 13 of the Tier II operating permit contains a compliance schedule for the TASCO facility. As part of this compliance schedule, TASCO is required to replace the Center and North pulp dryers with a steam dryer system. The steam dryer system will reduce total emissions from the pulp dryers; however, technical and operational constraints mandate a five-year period to fully install the steam dryer system. Permit Condition 13.8.2 requires that the Center and North dryer cease operation within five years of permit issuance.

Permit Condition 13.5.1 requires that TASCO submit a PTC application for the steam system to insure that any increase in emissions from the facility are evaluated by DEQ before construction and operation of the new process. Permit Condition 13.8.3 requires that TASCO notify DEQ when the Center and North dryers cease operation. Refer to Section 13 of the Tier II operating permit for additional compliance schedule requirements.

Process Weight Rate Limit – (Permit Condition 5.4)

Permit Condition 5.4 requires PM emissions from the pulp dryers to comply with the process weight rate limits established by IDAPA 58.01.01.702. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Although IDAPA 58.01.01.702.02(b) exempts equipment that is exclusively used to dehydrate beet pulp from the requirements of Section 702, TASCO has indicated that the dryers may be used for materials other than beets. Additionally, TASCO feeds CSB into the dryers along with beet pulp. Therefore, IDAPA 58.01.01.702 is applicable to the dryers.

Compliance Demonstration

The compliance schedule in Section 13 of the Tier II operating permit requires that emissions from the South dryer be reduced by half, while the Center and North dryers must cease operation within five years of permit issuance. Since the operational parameters from the South dryer, after the required emissions reduction, are currently unknown, it is not possible to demonstrate compliance with the process weight rate standard. Therefore, TASCO is required to conduct performance tests to demonstrate compliance with the process weight rate standard.

Facility-wide Condition 2.14.2 requires TASCO to conduct a performance test for PM emissions from the South dryer, using coal as the exclusive fuel during the test. During the source test, TASCO must monitor and record the pulp throughput of the dryer. Permit Condition 5.5 limits the pulp throughput of the dryer to the average throughput rate achieved during the most recent DEQ-approved source test. Since the performance test establishes compliance with the emissions limits in Permit Condition 5.4, and Permit Condition 5.5 establishes throughput limits on the dryer, continual compliance will be demonstrated so long as the process throughputs do not exceed the limit established in Permit Condition 5.5. Permit Condition 5.10 requires TASCO to monitor and record the throughput of the dryer.

6. Emissions Unit - Pellet Mills (S-D4, S-D5, S-D6, S-D7, S-D8)

Emissions Limit – (Permit Condition 6.3)

Permit Condition 6.3 establishes hourly and annual PM₁₀ emissions limits for the five pellet mills. The modeling analysis indicates that potential emissions of this criteria pollutant from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.11.3 requires the permittee to conduct a performance test to establish compliance with the PM₁₀ emissions rate limit in Permit Condition 6.3. The performance test must be conducted at worst-case conditions, and the throughput of each mill and the pressure drop across the baghouse must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 6.5 limits the pellet throughput of each mill to the 120% of the average firing rate achieved during the most recent DEQ-approved performance test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 6.3. Permit Condition 6.6 requires that the pressure drop across the baghouse be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the baghouse based, in part, on the monitoring parameters from the performance test. Permit Condition 6.7 requires TASCO to monitor and record the throughput mills, while Permit Condition 6.8 requires monitoring of the baghouse pressure drop. These permit conditions limit the emissions rate of PM₁₀ from the mills and use the pellet throughput the mills and the baghouse pressure drops as methods for determining continual compliance with the emissions limits of Permit Condition 6.3.

Section 13 of the Tier II operating permit contains a compliance schedule for the TASCO facility. As part of this compliance schedule, TASCO is required to install and operate a baghouse on the pellet mill's cyclones. The baghouse will reduce total emissions from the mills; however, fiscal and operational constraints mandate a one-year period to install the baghouse. Permit Condition 6.7 requires that pellet mill cyclone baghouse be installed and operated within one year of permit issuance. Permit Condition 13.4.4 requires that TASCO notify DEQ when the pellet cyclone baghouse is installed and operational. These provisions ensure compliance with the emissions limits of Permit Condition 6.3.

Process Weight Rate Limit – (Permit Condition 6.4)

Permit Condition 6.4 requires PM emissions from the pellet mills to comply with the process weight rate limits established by IDAPA 58.01.01.702. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

The process weight rate standards can be used in conjunction with the rated throughput capacity of each pellet mill to determine a maximum PM emissions rate limit for each pellet mill. A pellet mill cyclone baghouse will be installed in the first year of the permit term (refer to Permit Condition 6.7). The *Air Pollution Engineering Manual* (Air and Waste Management Association, 1992) states that well-designed and operated baghouses are "...capable of reducing overall particulate emissions to less than 0.010 gr/dscf..." Based on this information and additional information taken from the Tier I permit application, Appendix E contains calculations that demonstrate continual compliance with the process weight rate limit, so long as the baghouse is in operation. Permit Condition 6.6

requires TASCO to operate the baghouse during operation of the pellet mills. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for operation of the baghouse. These permit conditions assure compliance with the process weight rate standards, and no further demonstration of compliance is necessary.

7. Emissions Unit - A and B Lime Kilns (S-K1, S-K2)

Emissions Limit – (Permit Condition 7.3)

Permit Condition 7.3 establishes hourly and annual PM₁₀ and CO emissions limits for the two lime kilns. The modeling analysis indicates that potential emissions of these two criteria pollutants from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, these limits are included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.11.4 requires the permittee to conduct a performance test to establish compliance with the PM₁₀ and CO emissions rate limits in Permit Condition 7.3. The performance test must be conducted at worst-case conditions, and the lime rock throughput of each kiln and the pressure drop across the baghouse must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 7.5 limits the lime rock throughput of each kiln to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 7.3. Permit Condition 7.6 requires that the pressure drop across the baghouse be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for the kilns' baghouse based, in part, on the monitoring parameters from the performance test. Permit Condition 7.7 requires TASCO to monitor and record the lime rock throughput of each kiln, while Permit Condition 7.8 requires monitoring of the baghouse pressure drops. These permit conditions limit the emissions rate of PM₁₀ and CO from the kilns and use the lime rock throughput of each kiln and the baghouse pressure drop as methods for determining continual compliance with the emissions limits of Permit Condition 7.3.

Process Weight Rate Limit – (Permit Condition 7.4)

Permit Condition 7.4 requires PM emissions from the lime kilns to comply with the process weight rate limits established by IDAPA 58.01.01.702. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Particulate matter emissions from the kilns are only emitted from the lime kiln baghouse. All PM emissions routed through the carbonation system are removed from the exhaust stream before release to the atmosphere.

The process weight rate standards can be used in conjunction with the rated throughput capacity of each kiln to determine a maximum PM emissions rate limit for each kiln. The *Air Pollution Engineering Manual* (Air and Waste Management Association, 1992) states that well-designed and operated baghouses are "...capable of reducing overall particulate emissions to less than 0.010 gr/dscf..." Based on this information and additional information taken from the Tier I permit application, Appendix E contains calculations that demonstrate continual compliance with the process weight rate limit, so long as the baghouse is in operation. Permit Condition 7.6 requires TASCO to operate the baghouse during operation of the kilns. Facility-wide Condition 2.15

requires TASCO to develop an O&M manual for operation of the baghouse. These permit conditions assure compliance with the process weight rate standards, and no further demonstration of compliance is necessary.

8. Emissions Unit - Process Slakers (S-K4)

Emissions Limit – (Permit Condition 8.3)

Permit Condition 8.3 establishes hourly and annual PM₁₀ emissions limits for the two process slakers. The modeling analysis indicates that potential emissions of this criteria pollutant from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.12.2 requires the permittee to conduct a performance test to establish compliance with the PM₁₀ emissions rate limit in Permit Condition 8.3. The performance test must be conducted at worst-case conditions, and the throughput of each process slaker and water flow rate through the scrubber must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 8.5 limits the calcium oxide rock throughput of each slaker to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 8.3. Permit Condition 8.6 requires that the scrubber nozzle header pressure be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the slakers' scrubber based, in part, on the monitoring parameters from the performance test. Permit Condition 8.7 requires TASCO to monitor and record the throughput of each slaker, while Permit Condition 8.8 requires monitoring of the scrubber nozzle header pressure. These permit conditions limit the emissions rate of PM₁₀ from the slakers and use the calcium oxide rock throughput of each slaker and the scrubber water flow rate as methods for determining continual compliance with the emissions limits of Permit Condition 8.3.

Process Weight Rate Limit – (Permit Condition 8.4)

Permit Condition 8.4 requires PM emissions from the process slakers to comply with the process weight rate limits established by IDAPA 58.01.01.702. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Facility-wide Condition 2.12.2 requires TASCO to conduct a performance test for PM emissions from the process slakers. During the source test, TASCO must monitor and record the throughput of each slaker. Permit Condition 8.5 limits the throughput of each slaker to 120% of the average throughput rate achieved during the most recent DEQ-approved source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 8.4. Since the performance test establishes compliance with the emissions limits in Permit Condition 8.4, and Permit Condition 8.5 establishes throughput limits on the slakers, continual compliance will be demonstrated so long as the process throughputs do not exceed the limit established in Permit Condition 8.5. Permit Condition 8.7 requires TASCO to monitor and record the throughput of each slaker.

9. Emissions Unit - Drying Granulator (S-W1)

Emissions Limit – (Permit Condition 9.3)

Permit Condition 9.3 establishes hourly and annual PM₁₀ emissions limits for the drying granulator. The modeling analysis indicates that potential emissions of this criteria pollutant from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.12.3 requires the permittee to conduct a performance test to establish compliance with the PM₁₀ emissions rate limit in Permit Condition 9.3. The performance test must be conducted at worst-case conditions, and the throughput of the drying granulator and brix of the scrubber fluid must be monitored during each source test. Brix is defined as percent solids in thin juice, and is used as a parameter for monitoring control efficiency of the scrubber.

Based on the most recent DEQ-approved performance test, Permit Condition 9.5 limits the throughput of the granulator to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 9.3. Permit Condition 9.6 requires that the brix of the scrubber fluid be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop O&M manuals for the granulator's scrubber based, in part, on the monitoring parameters from the performance test. Permit Condition 9.7 requires TASCO to monitor and record the throughput of the granulator, while Permit Condition 9.8 requires monitoring of the brix of the scrubber fluid. These permit conditions limit the emissions rate of PM₁₀ from the granulator and use the throughput of the granulator and the scrubber water flow rate as methods for determining continual compliance with the emissions limits of Permit Condition 9.3.

Process Weight Rate Limit – (Permit Condition 9.4)

Permit Condition 9.4 requires PM emissions from the drying granulator to comply with the process weight rate limits established by IDAPA 58.01.01.701. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Facility-wide Condition 2.13.3 requires TASCO to conduct a performance test for PM emissions from the cooling granulator. During the source test, TASCO must monitor and record the throughput of the granulator. Permit Condition 9.5 limits the throughput of the granulator to the average throughput rate achieved during the most recent DEQ-approved source test. Since the performance test establishes compliance with the emissions limits in Permit Condition 9.4, and Permit Condition 9.5 establishes throughput limits on the granulator, continual compliance will be demonstrated so long as the process throughputs do not exceed the limit established in Permit Condition 9.5. Permit Condition 9.7 requires TASCO to monitor and record the throughput of the granulator.

10. Emissions Unit - No. 1 and No. 2 Cooling Granulators (S-W2, S-W3)

Emissions Limit – (Permit Condition 10.3)

Permit Condition 10.3 establishes hourly and annual PM₁₀ emissions limits for the two cooling granulators. The modeling analysis indicates that potential emissions of this criteria pollutant from

the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.13.1 requires the permittee to conduct a performance test on the No. 1 cooling granulator to establish compliance with the PM₁₀ emissions rate limits in Permit Condition 10.3. The performance test must be conducted at worst-case conditions, and the throughput of the drying granulator and water flow rate through the scrubber must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 10.6 limits the throughput of both granulators to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 10.3. Since the granulators have the same rated capacity, the performance test results from the No. 1 cooling granulator will be used to develop operational parameters for the No. 2 cooling granulator. Permit Condition 10.7 requires that the pressure drops across the baghouses be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for both baghouses based, in part, on the monitoring parameters from the performance test. Permit Condition 10.8 requires TASCO to monitor and record the throughput of each granulator, while Permit Condition 10.9 requires monitoring of the baghouse pressure drops. These permit conditions limit the emissions rate of PM₁₀ from the granulators and use the throughput of each granulator and the baghouse pressure drop as methods for determining continual compliance with the emissions limits of Permit Condition 10.3.

Process Weight Rate Limit – (Permit Conditions 10.4 and 10.5)

Permit Conditions 10.4 and 10.5 require PM emissions from the No. 1 and No. 2 cooling granulators to comply with the process weight rate limits established by IDAPA 58.01.01.702 and 701, respectively. These are applicable permit conditions in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

The process weight rate standards can be used in conjunction with the rated throughput capacities of the granulators to determine a maximum PM emissions rate limit for each granulator. The *Air Pollution Engineering Manual* (Air and Waste Management Association, 1992) states that well-designed and operated baghouses are "...capable of reducing overall particulate emissions to less than 0.010 gr/dscf..." Based on this information and additional information taken from the Tier I permit application, Appendix D contains calculations that demonstrate continual compliance with the process weight rate limit, so long as the baghouses are in operation. Permit Condition 10.7 requires TASCO to operate the baghouses during operation of the granulators. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for operation of the baghouses. These permit conditions assure compliance with the process weight rate standards, and no further demonstration of compliance is necessary.

11. Emissions Unit - Process No. 2, Specialties, and Packaging Line Sugar Handling Systems (S-W4, S-W6, S-W7)

Emissions Limit – (Permit Condition 11.3)

Permit Condition 11.3 establishes hourly and annual PM₁₀ emissions limits for three sugar handling systems. The modeling analysis indicates that potential emissions of this criteria pollutant from the

facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.13.2 requires the permittee to conduct performance tests on each of the three sugar handling systems to establish compliance with the PM_{10} emissions rate limits in Permit Condition 11.3. The performance test must be conducted at worst-case conditions, and the throughput of the sugar handling system and the pressure drop across the baghouse must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 11.6 limits the throughput of each sugar handling system to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 11.3. Permit Condition 11.7 requires that the pressure drops across the baghouses be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for the handling systems' baghouses based, in part, on the monitoring parameters from the performance test. Permit Condition 11.8 requires TASCO to monitor and record the throughput of each handling system, while Permit Condition 11.9 requires monitoring of the baghouse pressure drops. These permit conditions limit the emissions rate of PM_{10} from the handling systems and use the throughput of each handling system and the baghouse pressure drop as methods for determining continual compliance with the emissions limits of Permit Condition 11.3.

Process Weight Rate Limit – (Permit Conditions 11.4 and 11.5)

Permit Conditions 11.4 and 11.5 require PM emissions from the sugar handling systems to comply with the appropriate process weight rate limits established by IDAPA 58.01.01.701 and 702. These are applicable permit conditions in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

Although the Tier II operating permit application gives an estimated grain-loading efficiency for each of the handling system baghouses, the rated capacities of each handling system are not included in the Tier II permit application. Without the rated equipment capacities, the PM emissions rate limit cannot be determined from the equations in Permit Conditions 11.4 and 11.5; therefore, compliance with the process weight rate limit cannot be determined from the baghouse information. In lieu of this information, a performance test is required to demonstrate compliance with the process weight rate standard.

Facility-wide Condition 2.13.2 requires TASCO to conduct a performance test for PM emissions from the three sugar handling systems. During the source test, TASCO must monitor and record the throughput of each handling system. Permit Condition 11.6 limits the throughput of each sugar handling system to the average throughput rate achieved during the most recent DEQ-approved source test. Since the performance test establishes compliance with the emissions limits in Permit Condition 11.4 and/or 11.5, and Permit Condition 11.6 establishes throughput limits on the handling systems, continual compliance will be demonstrated so long as the process throughputs do not exceed the limit established in Permit Condition 11.6. Permit Condition 11.8 requires TASCO to monitor and record the throughput of each handling system.

12. Emissions Unit - Lime Kiln Building (S-K3)

Emissions Limit – (Permit Condition 12.3)

Permit Condition 12.3 establishes hourly and annual PM₁₀ emissions limits for the lime kiln building. The modeling analysis indicates that potential emissions of this criteria pollutant from the facility, after implementation of the compliance plan, result in ambient impacts that are close to the NAAQS limit; therefore, this limit is included in the Tier II operating permit to safe guard the NAAQS. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.02.

Compliance Demonstration

Facility-wide Condition 2.13.3 requires the permittee to conduct performance tests on the lime kiln building baghouse to establish compliance with the PM₁₀ emissions rate limits in Permit Condition 12.3. The performance test must be conducted at worst-case conditions, and the total throughput of lime rock to the kilns and the pressure drop across the lime kiln building baghouse must be monitored during each source test.

Based on the most recent DEQ-approved performance test, Permit Condition 12.5 limits the throughput of lime rock to the kilns to 120% of the average throughput rate achieved during the source test, provided that this rate shows compliance with the emissions rate limits of Permit Condition 12.3. Permit Condition 12.6 requires that the pressure drops across the baghouses be maintained within the parameters of the O&M manual. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for the lime kiln building baghouse based, in part, on the monitoring parameters from the performance test. Permit Condition 12.7 requires TASCO to monitor and record the throughput of each kiln, while Permit Condition 12.8 requires monitoring of the baghouse pressure drop. These permit conditions limit the emissions rate of PM₁₀ from the lime kiln building and use the throughput of the kilns and the baghouse pressure drop as methods for determining continual compliance with the emissions limits of Permit Condition 12.3.

Process Weight Rate Limit – (Permit Condition 12.4)

Permit Condition 12.4 requires PM emissions from the lime kiln building to comply with the appropriate process weight rate limits established by IDAPA 58.01.01.702. This is an applicable permit condition in accordance with IDAPA 58.01.01.403.01.

Compliance Demonstration

The process weight rate standards can be used in conjunction with the rated capacity of the calcium oxide rock throughput of the kilns to determine a maximum PM emissions rate limit for the lime kiln building. The *Air Pollution Engineering Manual* (Air and Waste Management Association, 1992) states that well-designed and operated baghouses are "...capable of reducing overall particulate emissions to less than 0.010 gr/dscf..." Based on this information and additional information taken from the Tier I permit application, Appendix D contains calculations that demonstrate continual compliance with the process weight rate limit, so long as the baghouse is in operation. Permit Condition 12.6 requires TASCO to operate the baghouse during operation of relevant processes within the lime kiln building. Facility-wide Condition 2.15 requires TASCO to develop an O&M manual for operation of the baghouse. These permit conditions assure compliance with the process weight rate standards, and no further demonstration of compliance is necessary.

NSPS Applicability

No emissions sources at the TASCOCO facility are currently subject to regulation under NSPS.

NESHAP Applicability

No emissions sources at the TASCOCO facility are currently subject to regulation under NESHAP.

Compliance Schedule

Section 13 of the Tier II operating permit contains a compliance schedule that will be implemented by the permittee to ensure that the emissions sources do not cause or significantly contribute to a violation of the NAAQS. The facility-wide modeling analyses conducted for the TASCOCO facility indicate that emissions of PM₁₀, SO₂, and NO_x must be reduced to successfully demonstrate compliance with IDAPA 58.01.01.402.02. The facility's proposal for meeting the required emissions reductions requires a five-year implementation period and can be found in Section 5 of the Tier II application. The compliance schedule contained in Permit Conditions 13.3-13.9 is required in accordance with IDAPA 58.01.01.405.01.

Permit Condition 13.2 contains emissions limits for the three pulp dryers and the five pellet mills. These emissions rates were used in the Northern Ada County PM₁₀ Maintenance Plan to demonstrate attainment for the area. Although the provisions permit Conditions 13.3-13.9 ensure that emissions from these sources will eventually be decreased to the emissions limits in Permit Conditions 5.3 and 6.3, the Northern Ada County PM₁₀ Maintenance Plan requires federally-enforceable emissions limits by 2002. Therefore, Permit Condition 13.2 establishes emissions limits that are used for the maintenance plan until such time as the emissions limits of Permit Conditions 5.3 and 6.3 can be implemented through the compliance schedule. Facility-wide Condition 2.10 requires performance testing to demonstrate compliance with the emissions limits of Permit Condition 13.2.

Permit Condition 13.3.1 requires TASCOCO to implement the requirements of Facility-wide Conditions 2.1 through 2.4 within 60 days of permit issuance. Facility-wide Condition 2.2 contains the provisions of the Fugitive Dust Management Plan, intended to reduce fugitive emissions from the facility. Permit Condition 13.3.2 requires TASCOCO to notify DEQ when the requirements of Permit Condition 13.3.1 are fulfilled.

Permit Condition 13.4.1 requires TASCOCO to implement the requirements of Permit Conditions 6.7 and 6.9 within one year of permit issuance. Permit Condition 6.7 requires the installation and operation of a baghouse on the pellet mill's cyclones. Permit Condition 6.9 establishes monitoring requirements for the pellet mill cyclone baghouse. Permit Condition 13.4.2 requires TASCOCO to merge the flue gases from the Riley boiler into the B&W boilers' stack (Unit No. P-B1/2) within one year of permit issuance. Although the merging of flue gases does not constitute any form of emissions control, TASCOCO's modeling analysis used the merged flue gases to demonstrate compliance with IDAPA 58.01.01.403.02. Therefore, the flue gas merger is required in the compliance schedule. Permit Condition 13.4.3 requires TASCOCO to conduct the performance testing requirements of Facility-wide Conditions 2.11.1-2.11.3. Facility-wide Conditions 2.11.1-2.11.3 demonstrate compliance with the emissions limits in Permit Conditions 3.3 and 6.3, and assure that the emissions from the boilers and pellet mills are compliant with permitted emissions limits. Permit Condition 13.4.4 requires TASCOCO to notify DEQ when the requirements of Permit Conditions 13.4.1-13.4.3 are fulfilled.

Permit Condition 13.5.1 requires TASCOCO to submit a PTC application for the proposed steam dryer system project within two years of permit issuance. The application is required in accordance with IDAPA 58.01.01.201. Although the Tier II operating permit indicates that the emissions from the steam system will not directly produce any emissions increase, the PTC application is required to verify that the steam system and any affected units will not result in any potential emissions rate increases. Permit Condition

13.5.2 requires TASCO to install the beet cleaning system required for operation of the steam dryer system, pending a DEQ action on the PTC application required by Permit Condition 13.5.1. Permit Condition 13.5.3 requires TASCO to notify DEQ when the requirements of Permit Conditions 13.5.2 are fulfilled.

Permit Condition 13.6.1 requires TASCO to install the evaporator transformer and mill heaters required for operation of the steam dryer system during the third year of the Tier II permit term, pending a DEQ action on the PTC application required by Permit Condition 13.5.1. Permit Condition 13.6.2 requires TASCO to notify DEQ when the requirements of Permit Condition 13.6.1 are fulfilled.

Permit Condition 13.7.1 requires TASCO to order and fabricate the steam dryer system during the fourth year of the Tier II permit term, pending a DEQ action on the PTC application required by Permit Condition 13.5.1. Permit Condition 13.7.2 requires TASCO to notify DEQ when the requirements of Permit Condition 13.7.1 are fulfilled.

Permit Condition 13.8.1 requires TASCO to install and order the steam dryer system during the fifth year of the Tier II permit term, pending a DEQ action on the PTC application required by Permit Condition 13.5.1. Permit Condition 13.8.2 requires the Center and North dryers to permanently cease operation at the facility during the fifth year of the Tier II permit term. Permit Condition 13.8.3 requires TASCO to notify DEQ when the requirements of Permit Conditions 13.8.1 and 13.8.2 are fulfilled.

Permit Condition 13.9 requires TASCO to submit a facility-wide Tier II operating permit application after the requirements of Permit Condition 13.8 have been met. The purpose of this requirement is to update the Tier II operating permit to incorporate the process changes, performance test information, and emissions rate reductions required by the current Tier II operating permit and the compliance schedule. All applicable emissions standards, as well as an impact analysis for the NAAQS, will be re-addressed in the development of this Tier II permit.

AIRS

Table 5.3: AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A - Attainment U - Unclassifiable N - Nonattainment
POLLUTANT							
SO ₂	A	A				A	U
NO _x	A	A				A	U
CO	A	A				A	U
PM ₁₀	A	A				A	A
PM	A	A				A	U
VOC	A	B				A	U
NH ₃	A	ND				ND	
Total HAPs	B	B				B	
			APPLICABLE SUBPART				

AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

6. TIER II OPERATING PERMIT FEES

A Tier II operating permit application fee (\$500) does apply to this facility, in accordance with IDAPA 58.01.01.470 (3-7-95). TASCO submitted payment of this fee on August 14, 2002.

7. RECOMMENDATIONS

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends that DEQ issue a draft Tier II operating permit to TASCO for facility-review. An opportunity for public comment on the air quality aspects of the proposed operating permit shall be provided in accordance with IDAPA 58.01.01.404.01.c. The permit will be issued upon receipt of the fee.

8. BIBLIOGRAPHY

1. Air and Waste Management Association. *Air Pollution Engineering Manual*. A.J. Buonicore and W. Davis, Eds. Van Nostrand Reinhold. New York, NY. 1992.
2. U.S. Environmental Protection Agency. *Compilation of Air Pollutant Emission Factors AP-42*. Volume I. 5th edition. Office of Air Quality Planning and Standards, Office of Air and Radiation. Research Triangle Park, NC. January 1995.

SO/sm T2-027-00010 G:\AIR QUALITY\STATIONARY SOURCE\SS LTD\T2\TASCO\FINAL\TASCO NAMPA T2-027-00010 TECH MEMO.DOC

cc: Sherry Davis, Technical Services
Joan Lechtenberg, AQ Program Office
Mike McGown, Boise Regional Office